

FISH & WILDLIFE CROSSINGS—Crossing Structures #3 CULVERTS



Photo by Dwight Forsyth - FHWA Web Page

Wall with Lip and Culvert

Location: Central Florida - US 441

Size: 3.5 ft. (1.1M.) concrete wall with 6" (15.2 cm) lip at the top.

Why built: To deter amphibians and reptiles from crossing over the road and funnel them to underpass culverts.

(Construction began in December 1999).

Suitable for: Small mammals, reptiles and amphibians

Effectiveness: Wall will be monitored for effectiveness.



Photo by Dwight Forsyth - FHWA Web Page

Medium Culvert

Location: California, San Bernadino County - State Highway 58

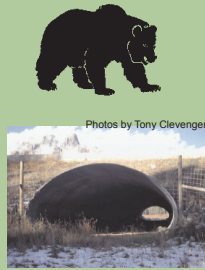
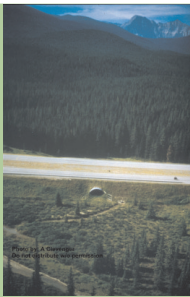
Why built: To allow slow moving desert tortoises to safely cross the road.

Suitable for: Small mammals, reptiles and amphibians.

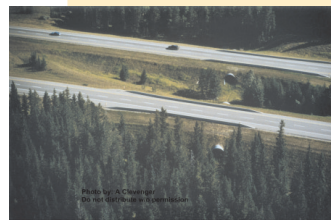
Effectiveness: Monitoring system confirms multiple tortoises using the culverts with frequency.



Photo by William Boarman - FHWA Web Page



Photos by Tony Clevenger



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Large Elliptical Metal Culvert - Castle

Location: Banff National Park, Canada Trans-Canada Highway

Size: 4M X 7M

Why built: To facilitate safe wildlife passage across highway.

Suitable for: Carnivores, ungulates, small mammals, fish, amphibians and reptiles.

Effectiveness: One grizzly has used the underpass as well as many black bear, wolves, coyotes, and ungulates (from 11/96-6/00).

Large Round Metal Culvert Morrison Coulee

Location: Banff National Park, Canada Trans-Canada Highway

Size: 4M

Why built: To facilitate safe wildlife passage across highway.

Suitable for: Carnivores, ungulates, small mammals, fish, amphibians and reptiles.

Effectiveness: Black bear, wolves, cougars, coyotes and ungulates have used the underpass. (from 11/96-6/00).

US 93 DESIGN DISCUSSIONS

Project Committee:

Montana Department of Transportation

Federal Highway Administration

The Confederated Salish & Kootenai Tribes of the Flathead Nation

Prime Consultant: Skillings-Connolly, Inc. - Consulting Engineers

Evarto to Polson, Montana

December 20, 2000



Architects & Landscape Architects

In order to facilitate the safe movement of wildlife across the landscape, wildlife crossing structures are necessary in many locations along US 93. This graphic looks at how wildlife crossings have been used successfully for other projects across North America. In particular, this sheet depicts various types of culvert. By examining different types of crossing structures, we can determine which types of crossings are best suited for US 93.